

The Compleat MODELLIST:

S H E W I N G

The true and exact way of raising the Model
of any Ship or Vessel, small or great, either in
proportion, or out of proportion.

*Also the manner how to find the length of every
Rope exactly. And Tables which give the true
bignesse of every Rope in each Vessel.*

Together with the Weights of their Anchors
and Cables.

Performed by THOMAS MILLER, of great Yarmouth Seaman;
And Master in the Art of Raising the Model.



L O N D O N,

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SCIENCE

AND

ARTS

Vol. 1

To the Right Worshipful Major
WILLIAM BURTON;
ALDERMAN

Of the Town of great Yarmouth, Esquire.

SIR,



with you much peace and happinesse both in soule and body, Sir, I doe very well know, and am sensible, that you are a great deal better knowing in this Art of Rigging, then my weak fancy will ever attain unto, which did invite me to present You with my weak Works: And knowing You to be one that was ever very free to except of the well meaning of any one; which did the more urge me to the performance of the same, not fearing but it would have a loving acceptance from Your Worthy self to publish the same. So desiring not to be tedious, but only to present my humble thankfulness for former Courtesies received from You, I shall ever remain,

Your Worships

Humble Servant

THOMAS MILLER.

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TO

To the R E A D E R.



Entle READER, I do here present you with the Rare and exact way of Rigging by the Modell. But I must confess it is by the perswasions of some that have the true taste of it: for I did not intend to publish it as yet, but taking it into a serious consideration, I thought it not convenient any longer to obscure the reflection of such a true light, and as it is truth, so it is so plain and easie, that any one although he could never before obtain to cut out a ships Rigging, may by this way Rigge any Ship small or great, with a weeks practice or less. But if it were half so easie again as it is, which is almost impossible, yet I say, if it were so easie, it is possible a man may have the Book, and yet never come to Rigge a Ship, if he do not endeavour to get the use of the Book, which is a thing that may soon be obtained.

Likewise, I could have shewed a great deal of Curiosity in the Models and have drawn them perfectly like a Ship: for, for matter of drafting, few or none go beyond me. But I find it not convenient, for at first, I did do so, and some that I learned, were so wise they could almost have left the Goose to run after the Feather, that is, they were Vessels, so affected with the draft of the Ship, they minded that more than the substance that belonged to it. So I have now in every respect laid it down by way in a more plain manner, and as I find this Book to be accepted of, I shall present you with another in the future. So I conclude,

And remain yours

in all my practice

THOMAS MILLER

this way
Rigging is
certain &
hold true
Vessels,
or great,
for those
by way
proportion,
erly prin-
cannot
but will
ve those
trust to



Instructions for the raising of the Model of any Ship or Vessel, small or great.

When you go to raise the Model of any ship or vessel, you must in the first place know the length of her Keel, and the depth in her Hold, and the breadth of her Beam.

First knowing the length of the Keel, take the length of the Keel off your Scale, and place it on your paper that you intend to raise your Model on, making two pricks one with one point of the Compasses, the other with the other, then draw a line with your pen or pencil of black lead, as from *A* to *B*. *The length of the Keel.*

Then take the depth of the Hold off from your Scale with your Compasses, and set one foot in the end of the Keel line at *A*, and with the other make a prick at *D*, and likewise from *B* to *C*: then with your Ruler and black lead, or pen, draw another line parallel with the Keel, and that is the line for the first Deck. *The depth of the Hold from the Keel to the first Deck.*

Then for the height between the first and second Deck, which appeareth in the figure following, to be 6 foot and a half, then take 6 foot and a half off from your Scale, and set one foot of your compasses at *D*, and with the other make a prick at *E*, and likewise from *C* to *F*. So must you doe for the height between the 2^d and 3^d Deck, and so for the Cabin and Coch & round House above that, and for the fore-castil all in the same manner, and then draw lines from prick to prick. *The height between the first & second Deck.*

Then for the Stem raise a perpendicular line from the fore-part of the Keel to the second Deck, then take 2 thirds of the depth in hold, which in the figure is 12 foot, then set 1 foot of your compasses at *B*, and with the other mark a prick at *G*: so likewise set 1 foot in the upper end of the line at *H*, and with the other foot make a prick at *I*, then draw a line from *G* to *I* parallel to that from *B* to *H*, then from that *To raise the Stem.*

A Rule for mastling and yarding by proportion.

outermost line, draw the Stem to the Keel with what sweep you please running the top of your Stem 3 or 4 foot above the line, as it is in the figure, then you may draw it double as you please, and the Keel likewise.

Note.

*The making
of the Scale.*

And when you draw your Deck lines, let your lower Deck-line run a foot or 2 beyond the end of the Keel aft, and so in like manner all your Decks, and then joyn them together something rounding, that the Model may have a Rake aft, and shew ship shape. You must draw your Model and Scale together at the Keel, as you see in the figure D, and note how many feet loever your Model is by the Keel, so make and divide the Scale into 15 equal parts, as is shewed, the 2 first equal parts of the Scale divide into 20 feet, 6 of those feet are one Fathom, and 12 of those feet are two Fathom. And the other 13 divisions numbred by 10, 20, 30, &c. to 130 are 10 feet a piece. By the Fathoms I measure the length of the Ropes: and also the Canvas for the sailes, and by the Scale of equal parts, I measure the Model, the larger you draw the Models of your Vessels or ships, the better you may see to doe your work.

*A Rule for mastling and yarding by proportion,
but for my part I make no use of it, because it
will not hold.*

*The main-
mast.*

The main-mast must be twice and one half the length of the Beam.

The fore-mast.

The fore-mast eight ninths of the main-mast.

*Main-top-mast
& top-gallant-
mast.*

The main-top-mast half the main-mast, and the main-top-gallant-mast, half the main-top-mast.

*The fore-top-
mast, & top-
gallant-mast.*

The fore-top-mast, half the fore-mast, and the fore-top-gallant-mast, half the fore-top-mast.

The Bolt-sprit.

The Bolt-sprit, the length of the Fore-mast.

*The misen-mast
& misen-top-
mast.*

The misen-mast, the heighth of the main-top-mast from the quarter Deck, and the misen-top-mast half that.

*Main-yard &
main-top-sail-
yard.*

The main-yard 6 seven parts of the main-mast, and the main-top-sail-yard half that, and top-gallant-yard half that.

The

The use of the Model.

3.

The fore-yard eight ninths of the main-yard, and the fore-top-sail-yard half that, and top-gallant-yard half that.

Fore-yard & fore-top-sail-yard.

The mizen-yard something shorter then the fore-yard.

Mizen-yard.

The sprit-sail-yard and Cros-jack-yard both one, the Cros-jack-yard half the mizen-yard.

Sprit-sail-yard & Cros-jack-yard.

The sprit-sail-top-sail-yard half the sprit-sail-yard and the sprit-sail-top-mast almost half the sprit-sail-yard.

Sprit-sail-top-mast, and top-sail-yard.

Note, That all the small yards, are half the great yards from Cleat to Cleat, or from one earing of the top-sails to another, you may have what yard armes you please.

Note:

The use of the Model.

IN these figures you see two yards one Hoysted, and the other Lowered or a Portlens, the top-sail-yard also one Hoysted, and the other down upon the Cape, so must you make in all the Models you raise: the yard a portlens gives the length of top-sail-sheats, and lifts, and tye or Jeeres and Bunt-lines, and Leech-lines, or Halli-yards measuring from the Hownds to the Deck.

Use.

The yards Hoysted gives the length of Clew-lines, Brases, and Clew-garnets, and Tackes, and Sheates, and Bow-lines.

In the small ones, is shewed the length of Shrowds and Top-sails. Halliards with Brases, and Lifts, as in the figure *B*.

In the figure *A* is shewed how to give a near estimation, how many yards of Canvas is in a main Cowrse. When you come in any Ship or Vessel, and desire to know how many yards of Canvas is in the main, or fore-Cowrse: First, you must know the depth of your saile, and the breadth of the Canvas that the sail is made of, then take off so much from the scale as you see the Cloth is in breadth, and place so many cloths in the Model on the main or fore-yard, the same depth that the sayl is on, as you see the main-cowrse in this figure: after you have so done, then take a Faddom or two off from your scale, and measure every cloth up and down as you doe the Ropes, and that gives you the number of yards.

Note.

Likewise

Likewise, here is shewed in this figure the way how to place your Garnet and Runner, and Sprit-sail-top-sail, Cran-lines, and main-stay, and fore-stay, to find the true length of them.

In the figure *C* is shewed the way to find the number of yards, that is in a main or fore-top-saile, the same way that you measure one sail, you must measure all.

Observe.

But this you must observe, that you are to place your middle Cloath first in a top-sail, and so from thence to each yards arm, that your goers at the Clew may fall out right.

So likewise to find the length of all Ropes.

Likewise, it sheweth the length of main-top-sail-bow-lines, and so you must doe to find the length of fore-top-sail-bow-lines: draw only a line from the top-sail-yard-arm, to the main-yard-arm with your pen, or black lead: Note from the further yard-arm, that you may take them at the largest extent, and so your Brasés: in like manner, it shewes also the length of main-bow-line, and main-sheat, and main-tack and single-garnet.

All this I could have performed in one Model, but then it would have been so full that you would not so well have understood it: but you may perform all in one figure, in starching 3 or 4 sheets of paper together, and then your Model will be of a very good volume, for the bigger it is, the lesse error will be, & your best way to perform all in one Model, is, to draw your yards with black lead only, especially the lowest yards, and then you may rub them out after you have measured out your Rigging, leaving only a little speck or spot, at the end of each yards-arm, that you may the easier draw them again, if you have occasion, the two spots will give you the length of them again, without any more trouble, and then it will not be so easie for any one to steal away the use of your Model by, as he that hath an ingenious pate may do: and to prevent that, I seldome let any yards be seen, but only leave two little pricks to give me the length of them, at any time, when occasion require.

And then I draw them out again with black lead, and measure out my Rigging, and write them in a piece of paper, and then with the crums of white bread, and a clean linnen cloth, I rub them out again, and so leave only the mast standing.

The fore^r channel bines.

Then for the Channel bines, if you see the Ship or Vessel, then you know the better where to place them, or if she be upon the stocks, that they be not brought too, he that is a Seaman will give a neer guess where they should be, and if they be not placed just in the place where

The use of the Model.

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where they should be it is no great matter. But rather endeavour to place them a little too low rather than too high.

Or two thirds of the stay or main-mast is a good Rule for your Shrowdes, for your stay must be as long as the mast. *The length of stay & shrowdes*

Then for the placing of your mast, there is very few but knows the main-mast must stand in the middle, and to that end raise a perpendicular line from the middle of the Keel, making a little step some two foot, or two foot and a half, as is in the figure *D* at *K*, if your step be not so high as it should be, or if it be a little higher then it should be, so it be not too much, it breaks no square so long as you give a handsome allowance for the end of your shrowdes to turn up. *To place the Main-mast.*

Then after you have raised the mast at his proper length, then allow for the mast-head, and their place, the cross-trees, but if you measure your mast as it is allowed any Boate-Swain to do: then you must mind the height of the mast-head, and it is the surest way to know exactly the length of the mast and yards, and then you cannot work amiss: for I have measured very few masts, but differ something, therefore I advise you to know the true length of your mast and yards.

Now the fore-mast stands just upon the brest-hook, and there you must place a thing imitating a step, of some 6 or seven foot high, or 4 or 5 foot high, according as the ship or vessel is in bigness, or according as you see the fore-mast will stand in proportion to the main-mast, as your eye will give you that: and as you see it agrees with the main-mast in height, so place your step as in the Model *D*, at *L*: and if it stand half a foot too high or too low, it is no great matter, so long as the shrowdes are long enough. *To place the fore-mast.*

Now in placing your misson-mast, your judgment must be better there, than about any mast: because there is no just Rule to be given, but only your eye must be your best Rule. *To place the misson-mast.*

Therefore, after you have raised your Model and placed your main-mast, then observe the Model well, and you may soon perceive where you shall place the misson-mast: and this observe that if it becomes not the Model, it will not become the ship, neither that nor no mast nor Rigging about the ship or vessel, for after you have raised the true Model of any ship or vessel, it is just then, as if you were placing of the masts in the Vessel it self, and after you have placed your masts and yards, you may measure out your Rigging as exactly as if you should measure from place to place on Board the ship or vessel, with a lead-line or span-yard where every rope should go.

Note.

B

Now

the Bolt-sprit.

Now the Bolt-sprit you must place as you see in the Model *D*, at *H F C*, letting it run some six foot beyond the fore-mast, this must be done in a ship, but in other vessels they are placed otherways, therefore you must place them as you see the vessel requires.

*or the height
between decks.*

Now after you have the true length and depth and breadth of any ship or vessel given you by any one, that you are sure knowes, you may give a guess your self for the height between Decks, if she have two Decks *a* the height in the steridge, and great Cabin and round-house if she have any, and likewise the Fore-castle, for my own part I never see no ship nor vessel since I began to practise this Art: but I could give a neer estimation of her heights between Decks, and the like without measuring, if I did but see the ship or vessel, but indeed if I went a Board, I could guess the better by my own height. And I would be sure to account them rather with the lowest then with the highest, that my Rigging should fall out long enough.

The practice

Your only way to be expert in raising of the Model, is to make a Book of large and good paper Royal, and what ship or vessel soever you come in, you may by discourse with the Master or Carpenter come to know the true length and depth, and breadth, and height of masts, and length of yards.

Or if she be a Merchant ship, you may measure the depth in hould and breadth of the Beam your self, when she is light and her Ballast out, and likewise when she lay a shore, with a Carpenters Rule measure the Keel and the masts and yards likewise, when you have opportunity, and then raise the Model of her in your Book.

And likewise, if you be in any ship that lay up in Winter, then you have an opportunity for your own ship, or any ship or vessel that lyes by you to get the Model of them, then place them in your Book of models, then at any time if you fall with a vessel to rigge of any of them demensions, there you have the Model raised to your hand.

And likewise, when you are at home in the day time or in the evening, you may upon your slate or on paper, with your black-lead pensil, that you may rub out, as before is mentioned, raise an hundred models by supposition, which will bring your hand into the way of raising a Model compleat and handsome.

And likewise, you will by that come to be expert and perfect in giving allowance for the sweep of masts-heads, and blocks, and dead-men-eyes, and the like: That when you come to raise a Model by a true proportion, you may go through with your work without fear: for it will
come

come to you with ease enough if you take but any pains at all to practise it, and not to doe as a great many doe, to buy Books and be a little fond of them at the present, and afterward lay them up, and never practise by them till they have occasion indeed to make use of them, and then they run to head-long upon the Work, that there is one gross error or other in there work, and then to like themselves wholly they impute the fault on the Book or on the Author of it, when the fault lyes wholly in themselves for want of practise.

Therefore it is very good when you have opportunity, to be practising to raise a Model, for you cannot be too perfect, because the Rigging of a ship is a thing that cannot be done in secret, and you have many eyes upon you, and if you do not compleat your work, it makes such a blot in your Scurcheon that it will scarce were out in seven years time, for every one will be spending his verdict, as well he that knows nothing, as he that doth.

Therefore to prevent all dangers and to stop all mouthes, I advise you once more to be very diligent in practising your self, till you find that you are perfect in the work, which you will soon be by observing the Rules which I have before mentioned.

For the measuring of the Rigging you must have a pensil of black-lead on purpose for that use, then any Rope that you desire to measure; first, draw a line with the black-lead, and then measure it, and put that out again, then your Model will be the clearer to find the rest of the Rigging.

As for Brases draw a line from the yard-arm to the place where the Brase should goe, you may draw it double if you please as the Brases go, or you may draw but one single line, and so take a Fathom off from your Scale, and where it goes double tell two Fathom, and where it goes single tell but one.

And likewise fore-top-sail-shears, draw a line from the top-sail-yard that is upon the Cape, as you see in the Model D, down to the yards-arm, that is a Portlens, as you see it is from the fore-top-sail-yard to the fore-yard, then take one Fathom or two off your Scale, and measure from the top-sail-yard to the fore-yard upon the line that you have drawn, and then from the fore-yards-arm into the mast, and so down to the fore-castle, and there you have the just length of your top-sail-sheat, and it is left to your own discretion what stray you will allow; so likewise must you doe for your main-top-sail-sheat, and fore-top-gallant-clew-lines, and top-sail-clew-lines, you must doe as you see in

the Bolt-sprit. Now the Bolt-sprit you must place as you see in the Model *D*, at *H F C*, letting it run some six foot beyond the fore-mast, this must be done in a ship, but in other vessels they are placed otherwayes, therefore you must place them as you see the vessel requires.

or the height between decks. Now after you have the true length and depth and breadth of any ship or vessel given you by any one, that you are sure knowes, you may give a guess your self for the height between Decks, if she have two Decks *o* the height in the steridge, and great Cabin and round-house if she have any, and likewise the Fore-castle, for my own part I never see no ship nor vessel since I began to practise this Art: but I could give a neer estimation of her heights between Decks, and the like without measuring, if I did but see the ship or vessel, but indeed if I went a Board, I could guess the better by my own height. And I would be sure to account them rather with the lowest then with the highest, that my Rigging should fall out long enough.

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And likewise, you will by that come to be expert and perfect in giving allowance for the sweep of masts-heads, and blocks, and dead-men-eyes, and the like: That when you come to raise a Model by a true proportion, you may go through with your work without fear: for it will
come

The use of the Model.

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come to you with ease enough if you take but any pains at all to practise it, and not to doe as a great many doe, to buy Books and be a little fond of them at the present, and afterward lay them up, and never practise by them till they have occasion indeed to make use of them, and then they run to head-long upon the Work, that there is one gross error or other in there work, and then to like themselves wholly they impute the fault on the Book or on the Author of it, when the fault lyes wholly in themselves for want of practise.

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Therefore to prevent all dangers and to stop all mouthes, I advise you once more to be very diligent in practising your self, till you find that you are perfect in the work, which you will soon be by observing the Rules which I have before mentioned.

For the measuring of the Rigging you must have a pensil of black-lead on purpose for that use, then any Rope that you desire to measure; first, draw a line with the black-lead, and then measure it, and put that out again, then your Model will be the clearer to find the rest of the Rigging.

As for Brases draw a line from the yard-arm to the place where the Brase should goe, you may draw it double if you please as the Brases go, or you may draw but one single line, and so take a Fathom off from your Scale, and where it goes double tell two Fathom, and where it goes single tell but one.

And likewise fore-top-sail-sheats, draw a line from the top-sail-yard that is upon the Cape, as you see in the Model D, down to the yards-arm, that is a Portlens, as you see it is from the fore-top-sail-yard to the fore-yard, then take one Fathom or two off your Scale, and measure from the top-sail-yard to the fore-yard upon the line that you have drawn, and then from the fore-yards-arm into the mast, and so down to the fore-castle, and there you have the just length of your top-sail-sheat, and it is left to your own discretion what ttray you will allow; so likewise must you doe for your main-top-sail-sheat, and fore-top-gallant-clew-lines, and top-sail-clew-lines, you must doe as you see in

The use of the Model.

the Model, and so for any Ropes whatsoever, if you will have them go after your own way, draw a line with your black-lead where you will have it goe, and so measure the length of it. And there you have it (as a man may say) to an Inch. So I hope I shall not need to fill your head with any more stories, for here is directions enough for any one that hath any wit at all. And he that sees how to measure one Rope, may easily understand all the rest.

the staves.

But this, Note, That when you measure the staves, you must measure the Collar first double 3 or 4 Fathom, according as you see the Model require it, for as it becomes the Model, so it will become the ship or vessel, and you must know that the Collar belongs to the length of the stay.

the penents of
brases.

But for the Penents of Brases, you must measure them first 3 Fathom or 2 Fathom, as you see it will become the Model, and there mark the Block, and so measure the length of the Brace from that.

So desiring you, to mind well what is before mentioned, for I have cut it off as briefly as possible I may, that you might the easier get it by heart, which with small paines you may, and then you shall be the better able to discourse, and likewise to compleat your Work.

**Here followeth the bigness of Ropes, for such
Masts as followeth.**

The bigness of the Rigging for these main-masts, and main-top-mast: the fore-mast to these masts followeth in the next Page.

	Mast of 34 inch.	Mast of 33 inch.	Mast of 30 inch.	Mast of 29 inch.	Mast of 28 inch.	Mast of 20 inch.	Mast of 26 inch.	Mast of 24 inch.	Mast of 23 inch.	Mast of 19 inch.	Mast of 13 inch.	Mast of 12 inch.
	1 inch	2 inch	3 inch	4 inch	5 inch	6 inch	7 inch	8 inch	9 inch	10 inch	11 inch	12 inch
Penents of Tackles	8½	8	7	6½	6	5½	5	7	6	5	4	4
Runners	6	5½	5	5	4½	4	3½	5	5	4½	3½	3½
Falls of the Tackles	4	4	3½	3½	3	3	3	3½	3½	2½	2½	
Shrowdes	8½	8	7½	7	6½	5	5	7	6	5	4	4
Laniards	4½	4	4	3½	3	3	3	4	3½	3¼	2½	2½
Swifters	8½	8	7½	7	6½	5	5	5½	5	4½	3¾	
Laniards	4½	4	4	3½	3½	3	2½	3½	3	3	2½	
Stay	17	16	15	14½	14	10	8	12	11½	9½	6½	6
Collar at the stem	16	15	13	12	11	9	8	10	10	8	6	
Laniard of the stay	6	5½	5½	5	4	4	3½	4	4	3½	2½	3
Lifts	4½	4	3½	3½	3	3	2½	3	3	2½	2½	2
Lacks	9½	9	8½	8	6½	6	5	6½	6	5½	4	4
Sheates	6½	6½	6	6	5	4½	4	4½	4½	3½	2½	3
Bowlines	5½	5	4½	4½	4	4	3	3	3	2½	2½	
Bridles	4½	4½	4	4	3½	3½	3	3	3	2½	3	2½
Penents fore-brases	4	4	3¾	3½	3	3	2¾	3	3	2½	2	2½
Brases	3	3	3	3	2½	2½	2	2½	2½	2	1½	2
Clew-garnets	4	3½	3	3	2½	2½	2	3	2½	2½	1½	2
Jeers	8½	8	7	6	5½	5		6	4½	4		
Parrel Rope	6	6	5	5	4½	4	3	4½	4	3½	3	3
Brest-rope	8	7	6	6	5							
Runner of mart-lines	2½	2½	2½	2½	2	2						
Fall of mart-lines	3	2¾	2½	2	2	2		2½	2	2	1½	
Penent of the garnet	8½	8	7½	7	6	5	4½	6	5½	5	5	4
Tye	6	5½	5	5	4½	4	3½	3½	3½	3	3	3
Fall of the garnet	4½	4	4	4	3½	3½	3	3	3	2¼	2	2

Note, There Bunt-lines are in bignes as followeth,

3½	3½	3	2½
2	2	2	2
2	2	2	1½

Note, the ships that have no jeers there tye is 4 inches, and their halliards is 2½.

Main-top-mast-rigging	1	2	3	4	5	6	7	8	9	10	11	12
Penent of Tackles	5	5	4½	4	3½	3	2¾	3½	3½	2½		2
Fals of Tackles	2½	2½	2½	2½	2	2	1½	2	2	1½		1½
Shrowdes	5	5	4¼	4	4	3	3	4	3½	3	2¾	2½
Laniards	2½	2½	2¼	2	2	2	1½	2	2	1½	1	1
Back-stays	5	5	5	4	3½	3	2½	4	4	3½	2	2½
Laniards	3	3	3	2½	2½	2	2	2½	2	1½	1	1
Stay	8	7	6	5	5	4½	4	5	4½	3½	3	2½
Laniard	4	4	2½	2½	2	2	2¾	2	2½	2	1½	2

*The bignes of the
Bolt-sprit-rigging.*

Penents of sheats
Sheats
Clew-lines
Garnets
Penents of Brases
Brases
Halliards
Tye
Bunt-lines
Horse
Lifts

	Mast of 34 inch.		Mast of 32 inch.		Mast of 30 inch.		Mast of 29 inch.		Mast of 28 inch.		Mast of 26 inch.		Mast of 24 inch.		Mast of 23 inch.		Mast of 19 inch.		Mast of 13 inch.		Mast of 12 inch.	
	1	2	3	4	5	6	7	8	9	10	11	12	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch
	6	6	5 $\frac{1}{2}$	5 $\frac{1}{2}$	4 $\frac{1}{2}$	4	3 $\frac{1}{2}$	5	4 $\frac{1}{2}$	4	3	2 $\frac{1}{2}$	3	2 $\frac{1}{2}$	2	2	3 $\frac{1}{4}$	3	3	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$
	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4	3	3	2 $\frac{1}{2}$	2 $\frac{1}{2}$	4	3 $\frac{1}{2}$	3 $\frac{1}{4}$	3	2 $\frac{1}{2}$	3	3 $\frac{1}{2}$	3 $\frac{1}{2}$	3 $\frac{1}{4}$	3 $\frac{1}{4}$	3	3	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$
	3	3	3	2 $\frac{1}{2}$	2	2	2	3	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	2	3	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$
	3 $\frac{1}{2}$	3	3	3	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	3	3	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	3	3	3	2 $\frac{1}{2}$	2	1 $\frac{3}{4}$	1 $\frac{3}{4}$	1 $\frac{3}{4}$	1 $\frac{3}{4}$	1 $\frac{3}{4}$
	4	4	3	3	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	3	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	2	3	2 $\frac{1}{2}$	2	2	1 $\frac{3}{4}$	1 $\frac{3}{4}$	1 $\frac{3}{4}$	1 $\frac{3}{4}$	1 $\frac{3}{4}$	1 $\frac{3}{4}$
	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	2	2	2 $\frac{1}{2}$	2	2	2	2	2 $\frac{1}{2}$	2	2	2	1 $\frac{3}{4}$	1 $\frac{3}{4}$	1 $\frac{3}{4}$	1 $\frac{3}{4}$	1 $\frac{3}{4}$	1 $\frac{3}{4}$
	4 $\frac{1}{2}$	4	3 $\frac{1}{2}$	3 $\frac{1}{2}$	3 $\frac{1}{2}$	3	2 $\frac{1}{4}$	3 $\frac{1}{4}$	3	3	3	2 $\frac{1}{4}$	3 $\frac{1}{4}$	3	3	2 $\frac{3}{4}$	2 $\frac{3}{4}$	2 $\frac{3}{4}$	2 $\frac{3}{4}$	2	2	2
	7	6	6	6	5	4 $\frac{1}{2}$	4	6	5	4 $\frac{1}{2}$	4	4	6	5	5	5	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	2	2
	3	3	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	2	1 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$
	6	6	5 $\frac{1}{2}$	5 $\frac{1}{4}$	5	4	3	3	3	3	3	3	3	3	3	3	3	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$
	4	3	3	3	2 $\frac{1}{2}$	2	2	3	3	3	2	2	3	3	3	2 $\frac{1}{2}$	2	2	2	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$

*The bignes of the sprit-sail-
top-rigging.*

Shrowds
Lanyards
Penents of Brases
Brases
Tye
Halliards
Clew-lines
Penents of Tackels
Fals to them
Lifts
Puttockes
Parrel-Ropes

	1	2	3	4	5	6	7	8	9	10	11	12	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch
	3	3	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	2	1 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{4}$	2	1 $\frac{1}{4}$	1	3	3	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$
	2	1 $\frac{3}{4}$	1 $\frac{3}{4}$	1 $\frac{1}{2}$	1	1	1	2	1 $\frac{1}{2}$	1	1	1	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$
	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	2	1 $\frac{3}{4}$	1 $\frac{1}{2}$	1	1	2	1 $\frac{3}{4}$	1 $\frac{3}{4}$	1 $\frac{3}{4}$	1 $\frac{3}{4}$	1 $\frac{3}{4}$	1 $\frac{3}{4}$	1 $\frac{3}{4}$	1 $\frac{3}{4}$	1 $\frac{3}{4}$
	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1	1 $\frac{1}{2}$	1	1	1	1	1 $\frac{1}{2}$	1	1	1	1	1	1	1	1	1
	3	3	3	2 $\frac{1}{2}$	2	2	1 $\frac{1}{2}$	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$
	2	2	2	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$
	2 $\frac{1}{2}$	2	2	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$
	3	3	2 $\frac{1}{4}$	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	3 $\frac{1}{4}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$
	2	2	1 $\frac{3}{4}$	1 $\frac{1}{2}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$
	3	3	2 $\frac{1}{2}$	2	2	2	2	2 $\frac{1}{2}$	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	1 $\frac{3}{4}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$

The

*The bigness of misson-rigging.**The misson-mast.*

Penents of Tackles
 Runners
 Falls of Tackles
 Shrowdes
 Lanyards
 Tye
 Halliards
 Stay
 Lanyards
 Sheat
 Jeere
 Trufs
 Bow-lines
 Brayles
 Parrel-rope.

	Mast of 34 inch.	Mast of 32 inch.	Mast of 30 inch.	Mast of 29 inch.	Mast of 28 inch.	Mast of 26 inch.	Mast of 26 inch.	Mast of 24 inch.	Mast of 23 inch.	Mast of 19 inch.	Mast of 13 inch.	Mast of 12 inch.
	1 inch	2 inch	3 inch	4 inch	5 inch	6 inch	7 inch	8 inch	9 inch	10 inch	11 inch	12 inch
Penents of Tackles	5½	5	4½	4½	4½							
Runners	4	3½	3½	3½	3½							
Falls of Tackles	3	3	2½	2½	2½							
Shrowdes	5½	5	4½	4½	3½	3	2½	4	4	3	2	2½
Lanyards	3	2½	2½	2½	2	2	1½	2	2	1½	1½	1½
Tye	7	6½	6	5	5	4½	4					
Halliards	5	4½	3½	3	2½	2½	2	3½	3	2½	2	
Stay	6	5	4	3½	3½	3½	3	4	4	3	2½	2½
Lanyards	3½	3	2½	2½	2	2	1½	2½	2	1½	1	1½
Sheat	4	3½	3	2½	2½	2½	2	3	3	2½	2	1½
Jeere	5½	5	4	3½	3½							
Trufs	3½	3	2½	2½	2	2	1½	2½	2	2	1½	
Bow-lines	4	3	2	2	2	2	1¾	2½	2	1½	1½	1½
Brayles	2½	2	2	2	2	2	1½	2	1¾	1½	1½	1
Parrel-rope.	5½	5	4	3	3	3	2½	3½	3	2½	2	2

The Cros-jack.

Lifts
 Brases
 Penents
 Halliards.

	1 inch	2 inch	3 inch	4 inch	5 inch	6 inch	7 inch	8 inch	9 inch	10 inch	11 inch	12 inch
Lifts	4	3½	2½	2½	2	1½	1	2½	2½	2	1½	1
Brases	2½	2½	2	2	1½	1	1	2	1¾	1½	1	1
Penents	3½	3	2½	2¼	2	1½	1¼	2	1½	1¼	1	1
Halliards.	4	3½	3	3	2½	2	1½	2	1¾	1½	1½	1½

(13)

Bigness of miffen-top-mast
rigging.

	Mast of 34 inch.	Mast of 32 inch.	Mast of 30 inch.	Mast of 29 inch.	Mast of 28 inch.	Mast of 26 inch.	Mast of 24 inch.	Mast of 23 inch.	Mast of 19 inch.	Mast of 13 inch.	Mast of 12 inch.
	1 inch	2 inch	3 inch	4 inch	5 inch	6 inch	7 inch	8 inch	9 inch	10 inch	11 inch
Penents of Tackles	3 $\frac{1}{2}$	3	2 $\frac{1}{2}$	2 $\frac{1}{2}$							
Fals of Tackles	2 $\frac{1}{2}$	2 $\frac{1}{4}$	2	2							
Shrowds	3	3	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	1 $\frac{1}{2}$	1	2	2	2	
Laniards	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1 $\frac{1}{2}$	1	3 $\frac{3}{4}$		
Puttockes	3 $\frac{1}{2}$	3	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	1 $\frac{1}{2}$	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	
Penents of Brases	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	2	1 $\frac{3}{4}$	1 $\frac{3}{4}$	
Brases	2	2	1 $\frac{3}{4}$	1 $\frac{1}{2}$	1	1	1	1	3 $\frac{3}{4}$		
Bow-lines	2 $\frac{1}{2}$	2	1 $\frac{3}{4}$	1 $\frac{1}{2}$	1 $\frac{1}{4}$	1	1	1 $\frac{1}{2}$	1	3 $\frac{3}{4}$	
Bridles	2	2	1 $\frac{1}{2}$	1 $\frac{1}{4}$	1	1	1	1	3 $\frac{3}{4}$		
Clew-lines	2	2	1 $\frac{3}{4}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1
Tye	3	3	3	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	3	2	2	1 $\frac{1}{2}$
Halliards	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{4}$	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$
Lifts	2	2	1 $\frac{3}{4}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1	1	3 $\frac{3}{4}$	1
Parrel-rope	3	2 $\frac{1}{2}$	2	1 $\frac{3}{4}$	1 $\frac{3}{4}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	2	1 $\frac{1}{2}$	1	1
Runner of the stay	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2								
Penent of the stay	3	3	2 $\frac{1}{4}$	2	1 $\frac{1}{2}$						
Top-rope	4	3 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	2	1 $\frac{1}{2}$				
Parts of the stay	2	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1	1				
Penent for the back-	3	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$							
Falls (stays)	2 $\frac{1}{2}$	2	1 $\frac{3}{4}$								

C

The

The bignesse of the main
top gallant Rigging.

	Mast of 34 inch.	Mast of 32 inch.	Mast of 30 inch.	Mast of 29 inch.	Mast of 28 inch.	Mast of 26 inch.	Mast of 26 inch.	Mast of 24 inch.	Mast of 23 inch.	Mast of 19 inch.	Mast of 13 inch.	Mast of 12 inch.
	1 inch	2 inch	3 inch	4 inch	5 inch	6 inch	7 inch	8 inch	9 inch	10 inch	11 inch	12 inch
Penents of Tackles	3	3	2 $\frac{1}{2}$	2	2	2	2	2				1 $\frac{1}{2}$
Falls of Tackles	2 $\frac{1}{2}$	2	3 $\frac{3}{4}$	3 $\frac{1}{2}$	3	3	1 $\frac{3}{4}$					1 $\frac{1}{2}$
Shrowdes	3	3	3 $\frac{3}{4}$	3 $\frac{1}{2}$	3	3	2 $\frac{3}{4}$	2	2	1 $\frac{3}{4}$	1 $\frac{1}{2}$	1
Lanyards	1 $\frac{3}{4}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1	1	1	1	1
Puttocks	3 $\frac{1}{2}$	3	2 $\frac{1}{2}$	2	2	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1	1
Penents of back stays	3	3	2 $\frac{1}{2}$	2	2	2						
Falls to them	2	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1						
The Stay	3	3	3	2 $\frac{1}{2}$	2	2	1 $\frac{1}{2}$	2	1 $\frac{1}{2}$	1	1	1
Lanyard	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	2	2	1 $\frac{1}{2}$	1 $\frac{1}{4}$	1 $\frac{3}{4}$	1	1	1
Brases	2	1 $\frac{1}{2}$	1 $\frac{1}{4}$	1 $\frac{1}{4}$	1 $\frac{1}{4}$	1	1	1	1	3 $\frac{3}{4}$	3 $\frac{3}{4}$	3 $\frac{3}{4}$
Penent of Brases	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1	1	1	1	1
Bow-lines	2 $\frac{1}{2}$	2	1 $\frac{3}{4}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1	1	3 $\frac{3}{4}$	3 $\frac{3}{4}$	3 $\frac{3}{4}$
Bridles	2	1 $\frac{1}{2}$	1 $\frac{1}{4}$	1 $\frac{1}{4}$	1	1	1	1	1	3 $\frac{3}{4}$	3 $\frac{3}{4}$	3 $\frac{3}{4}$
Top rope	4 $\frac{1}{2}$	4	3 $\frac{1}{2}$	2 $\frac{1}{2}$	2	2	1 $\frac{1}{2}$					
Parrel-rope.	2 $\frac{1}{2}$	2	2	2	1 $\frac{3}{4}$	1 $\frac{1}{2}$	1	1 $\frac{1}{2}$	1	1	1	1
Tye	3	3	3	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	1 $\frac{3}{4}$	2 $\frac{1}{2}$	2	2	1 $\frac{3}{4}$	1 $\frac{1}{4}$
Halliards	3	2 $\frac{1}{2}$	2	2	1 $\frac{3}{4}$	1 $\frac{1}{2}$	1	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{4}$	1 $\frac{1}{4}$
Lifts	2 $\frac{1}{2}$	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1	1	1	1	1	1	1
Flag stiffe stay	2 $\frac{1}{2}$	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1						
Clew-lines	2	2	1 $\frac{3}{4}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1	1	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{4}$	1

The

The bignesse of the
Fore-top gallant
Rigging.

The bignesse of the Fore-top gallant Rigging.												
	Mast of 34 inch.	Mast of 32 inch.	Mast of 30 inch.	Mast of 29 inch.	Mast of 28 inch.	Mast of 26 inch.	Mast of 24 inch.	Mast of 23 inch.	Mast of 19 inch.	Mast of 17 inch.	Mast of 12 inch.	
	1 inch	2 inch	3 inch	4 inch	5 inch	6 inch	7 inch	8 inch	9 inch	10 inch	11 inch	12 inch
Tye	2 $\frac{1}{2}$	2 $\frac{1}{2}$	1 $\frac{3}{4}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{4}$	2 $\frac{1}{2}$	2	1 $\frac{1}{2}$	1 $\frac{1}{4}$	1 $\frac{1}{4}$
Halliards	2 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1	1	1	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1	1
Bow-lines	2	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{4}$	1 $\frac{1}{4}$	1	1	1	1 $\frac{3}{4}$		
Bridles	1 $\frac{3}{4}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1	1	1 $\frac{3}{4}$		
Stay	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	2	1 $\frac{3}{4}$	1 $\frac{1}{2}$	1	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1		
Shrowds	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	2	1 $\frac{1}{2}$	1		
Laniards	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1	1	1	1 $\frac{1}{4}$	1	1 $\frac{3}{4}$		
Parrel-rope	2	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1	1	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1		
Clew-lines	2	1 $\frac{3}{4}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{4}$	1 $\frac{1}{4}$	1	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1		
Brases	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{4}$	1 $\frac{1}{4}$	1	1	1	1	1 $\frac{3}{4}$		
Lifts	2	1 $\frac{3}{4}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{4}$	1	1	1	1	1		
Top-rope	3 $\frac{1}{2}$	3	3	2 $\frac{1}{2}$								
Penent of the tackles	3	2 $\frac{1}{2}$	1 $\frac{1}{2}$									
Falls	2 $\frac{1}{4}$	2	2									
Putrockes	3	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	1 $\frac{3}{4}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1	1		
Back staves	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2									

C

The

C. q. p. r.				C. q. p.				C. q. p.				
Sheat anchor	60	0	0	3	Sheat anchor	29	0	0	Sheat anchor	18	0	0
Best-bower	56	0	0	1	Best-bower	25	0	0	Best-bower	17	0	0
Small-bower	55	0	0		Small-bower	23	3	2	Small-bower	16	0	2
Sream-anchor	25	0	0	0	Stream-anchor	9	0	0	Stream-anchor	4	2	0
Kedg-anchor	7	2	0	2	Kedg-anchor	2	2	7	Kedg-anchor	2	2	0

Sheat-anchor	43	0	0	0	Sheat-anchor	28	0	0	Sheat-anchor	11	0	0
Best-bower	40	0	0	5	Best-bower	27	0	0	Best-bower	10	0	0
Small-bower	39	0	0	3	Small-bower	16	0	0	Small-bower	9	0	2
Stream-anch.	20	0	1	2	Stream-anchor	4	3	2				
Kedg-anchor	7	2	0	0	Kedg-anchor	2	3	0				

Sheat-anchor	35	3	3	2	Sheat-anchor	22	0	2	Sheat-anchor	7	0	0
Best-bower	34	0	0	2	Best-bower	11	0	0	Best-bower	6	0	0
Small-bower	31	2	2	7	Small-bower	9 $\frac{1}{2}$	0	0	Small bower	5	2	0
Stream-anch.	11	3	2	5	Stream-anch.	5	0	2				
Kedg-anchor	4	0	0	2	Kedg-anchor	2	0	0				

Sheat-anchor	32	0	0	0	Sheat-anchor	27	0	0	Best-anchor	5	0	2
Best-bower	30	0	0	0	Best-bower	23	3	5	Best-bower	4	0	0
Small-bower	27	0	2	2	Small-bower	23	0	0	Small-bower	3	2	3
Stream-anch.	11	0	0	0								
Kedg-anchor	3	1	0									

(17)

1	2	3
Inches	Inches	Inches
Cables of 21	Cables of 20	cables of 17
Cables of 20	Cables of 19	cables of 16
Cables of 14 $\frac{1}{2}$	Cables of 13	cables of 12
Cables of 10	Cables of 9	cables of 8
Cables of 9	Cables of 8	

4	5	6
cables of 17	cables of 15	cables of 13
cables of 16	cables of 14	cables of 12
cables of 11	cables of 9	

7	8	9
cables of 10	cables of 16	cables of 14
cables of 9	cables of 15	cables of 13
	cables of 10	cables of 12 $\frac{1}{2}$
		cables of 12
		cables of 8

10	11	12
cables of 12	cables of 8	cables of 8
cables of 11	cables of 7 $\frac{1}{2}$	cables of 7
	cables of 6	cables of 6

Weight.

Weight of Cables.

	<i>Inches</i>		<i>C.</i>	<i>q.</i>	<i>l.</i>
A Cable of	21	doth way	90	0	0
A Cable of	20	doth way	80	0	0
A Cable of	19	doth way	70	0	0
A Cable of	18	doth way	66	0	0
A Cable of	17	doth way	59	0	11
A Cable of	16	doth way	53	2	7
A Cable of	15	doth way	46	2	7
A Cable of	14	doth way	40	2	0
A Cable of	13	doth way	34	2	10
A Cable of	12	doth way	29	2	1
A Cable of	11	doth way	25	2	6
A Cable of	10	doth way	20	3	4
A Cable of	9	doth way	17	3	13
A Cable of	8	doth way	13	3	7
A Cable of	7	doth way	9	3	12
A Cable of	6	doth way	7	1	0
A Cable of	5	doth way	5	3	12
A Cable of	4	doth way	3	3	0

At

An Index.

IN the first Page is shewed, how to raise the Model of any ship, or vessel, small or great.

In the second page is shewed a Rule for masting and yarding.

From the third to the eight is shewed the use of the Model.

In the first column of the ninth page, where the figure of 1 stands on the top, is shewed the bigness of Rigging that is required in a ship, that the main-mast is 34 inches through.

In the second column is shewed the bigness of the Rigging the main-mast is 32 inches through.

In the third column is shewed the bigness of Rigging for a main-mast of 30 inches through.

In the fourth column is shewed the bigness of Rigging for a main-mast of 28 inches through.

In the fifth column is shewed the bigness of Rigging for a main-mast of 26 inches through.

In the sixth column is shewed the bigness of Rigging for a main-mast of 24 inches through.

In the seventh column is shewed the bigness of Rigging for a main-mast of 22 inches through.

In the eighth column is shewed the bigness of Rigging for a main-mast of 20 inches through.

In the ninth column is shewed the bigness of Rigging for the main-mast of 18 inches through.

In the tenth column is shewed the bigness of Rigging for a main-mast of 16 inches through.

In the eleventh column is shewed the bigness of Rigging for a main-mast of 14 inches through.

In the twelfth column is shewed the bigness of Rigging for a main-mast of 12 inches through.

In the tenth Page is shewed in the 12 columns the bigness of Rigging for the fore-mast, answerable for the main-mast, and main-top-mast in the ninth page.

In the 12 columns of the eleventh Page is shewed the bigness of sprit-sail, and sprit-sail-top-mast Rigging for such ships.

In the 12 columns of the twelfth Page is shewed the bigness of mizen-mast, and cross-jack Rigging.

In

In the 12 columns of thirteenth Page, is shewed the bigness of miffen-top-mast Rigging.

In the 12 columns of the fourteenth Page, is shewed the bigness of main-top-gallant Rigging.

In the 12 columns of the fifteenth Page is shewed the bigness of fore-top-gallant Rigging.

In the 16 page is shewed by the 12 figures, the Anchors for such ships that are to be masted and Rigged.

In the 17 page is shewed by the 12 figures, the Cables for such Anchors.

In the 18 page is shewed the weight of Cables.

From a Cable of 21 inches to a four-inch rope.

In the 19 page is shewed the Model of a great ship, of an hundred & 25 foot by the Keel, & likewise the making of the Scale.

In the 20 page is shewed the 3 small models.

Likewise, Note, that on the top of every column in the 9, 10, 11, 12, 13, 14, and 15 pages, there is a figure set, as thus, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12. which is to direct you aright to compleat a whole ships-rigging in bigness.

And as for the length, the Model gives you that so true, that you need not fear, but that your ship will be well Rigged.

So leaving you to your practice, and wishing you a good proceeding as well for your good as my credit. I conclude, and Rest

Tours

T. M.

F I N I S.